

Conclusion: Length of symptoms, symptomatic dominant side and gender are poor predictors of progression to surgery following carpal steroid injection.

0408: ORTHOPAEDICS IN THE UK PRESS

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Aim: To determine the portrayal of Orthopaedics in the United Kingdom press.

Methods: National newspaper articles were retrieved from LexisNexisTM Professional over 1 year (May 2009– May 2010), using the terms “Orthopaedic or Orthopedic”.

Results: 850 articles were retrieved and 504 were relevant. Orthopaedics was mentioned in passing in 56%, the main topic in 29% and the sole topic in 15%. Trauma (41%) was the main focus, followed by frames and paediatrics. The main anatomical focus was lower limbs (58%), upper limbs (12%) and spine (11%). Orthopaedic surgeons were quoted in 32% of articles. 20% of articles were hospital related. The rest were orthopaedic device company related (16%), new techniques (11%) and orthopaedic surgeon (9%) related. Overall, the tone of articles was:- positive (35%); negative (28%); neutral (37%). Articles looking at orthopaedic surgeons were 50% negative, 30% positive and 20% neutral.

Conclusions: Orthopaedics receives UK press attention as a main theme and in passing, concentrating on trauma and lower limbs. Majority of articles were neutral or positive, but the tone of articles of orthopaedic surgeons were significantly more likely to be negative than others. This profession must engage the press to improve the public image of orthopaedics.

0416: ELASTIC STOCKINGS OR TUBIGRIP FOR ANKLE SPRAIN: A RANDOMISED CONTROLLED CLINICAL TRIAL

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Background: Ankle sprains are generally self-limiting but significant proportion of patients with ankle sprains has persistent symptoms for months.

Aims: To evaluate whether elastic stocking improve recovery following ankle sprain.

Methodology: All patients within 72 hours of ankle sprain were identified in Accident & Emergency or the Fracture Clinic. Consenting patients, stratified for sex, were randomized to either: i) tubigrip or ii) class II below knee elastic stockings (ES) which were fitted immediately. The deep veins of the injured legs were imaged by duplex Doppler for deep vein thrombosis (DVT) at four weeks. Outcome was compared using the American Orthopaedic Foot and Ankle Score(AOFAS) and SF12 V2 for quality of life.

Results: In the 36 randomised patients, the mean (95% CI) circumference of the injured ankle treated by ES was 23.5(23–24)cm initially and 22(22–23)cm and 22(21–22.5) cm at 4 and 8 weeks ($p<0.001$) compared with 24(23–25)cm initially and 24(23–25)cm and 24(23–24.5)cm using tubigrip ($p<0.001$). By 8 weeks, the mean AOFAS and SF12v2 scores were significantly improved by ES at 99(8.1) and 119(118–121) compared with 88(11) and 192(99–107) with tubigrip ($p<0.001$). Of the 34 duplex images at four weeks, none had a DVT.

Conclusion: Compression improves recovery following ankle sprain.

0437: MINIMALLY INVASIVE AKIN OSTEOTOMY FOR HALLUX VALGUS

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Aims: Since 2009, a minimally invasive Akin osteotomy procedure has been carried out at a UK district general hospital, for the treatment of mild-to-moderate hallux valgus. The outcomes of this procedure are not well described in the international surgical literature. This case series describes radiological outcomes and complications at a median follow-up of 13 months.

Methods: The notes and radiographs of all patients who underwent this procedure were analysed retrospectively.

Results: Twenty six patients underwent the procedure between March 2009 and June 2011. 96% of cases were successfully performed as a daycase. All patients were followed-up in clinic. Mean pre-operative hallux valgus angle was 20.0°, mean post-operative hallux valgus angle was 7.7°, a statistically significant reduction ($p<0.05$). Overall complication rate was 27%. 2 (7.7%) patients developed infections requiring oral antibiotics, 1 (3.8%) patient required removal of the osteotomy screw, and 4 (15.2%) patients had ongoing pain and/or stiffness at the 1st MTPJ.

Conclusions: This case series demonstrates that a minimally invasive Akin procedure is effective at reducing hallux valgus angle. Overall complication rate was comparable to minimally invasive distal first metatarsal osteotomies. Randomised controlled trials are required to further compare the technique to alternative minimally invasive or open techniques.

0444: THE INTERSPINOUS DEVICE ‘SPINOS’: A CASE SERIES

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Interspinous devices can be used to achieve distraction between the spinous processes to improve symptoms in spinal canal stenosis. The study was to identify radiological and clinical outcomes when using the Spinos (Privelop Spine) device in lumbar canal stenosis.

Patients were identified and retrospectively analysed. Pre-operative and post-operative canal area and Oswestry Low Back Pain Disability questionnaire scores were recorded. 9 patients underwent surgery, one at two levels. Most was at L4/5 (67%). All patients underwent general anaesthesia, with a mean 4 day inpatient stay. Mean percentage increase in canal area at the level of surgery was 44%, range -3% to 158% (8% at the level above, 21% at the level below) which equated with a mean area increase of 41 mm², range -7 mm² to 98 mm² (14 mm² at the level above, 23 mm² at the level below). Patients reported an improvement of 3% in their questionnaire results.

The Spinos device seems to show promising results with regards improvement in canal size, however patient outcomes are disappointing. The potential for day case surgery under local anaesthesia needs to be evaluated further, but would have significant theoretical advantage in terms of anaesthetic morbidity and cost effectiveness.

0447: LOCAL INFILTRATION ANALGESIA COULD BE SUPERIOR TO NERVE BLOCK IN TOTAL KNEE ARTHROPLASTY SURGERY – A RETROSPECTIVE STUDY OF 87 CASES

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Aim: Total knee arthroplasty (TKA) is associated with significant post-operative pain. Local infiltration analgesia (LIA), a relatively new technique for postoperative TKA pain control, was introduced at our hospital in 2011, although conventional nerve block (NB) remains the method of choice. This study compares outcomes between LIA and NB in TKA patients.

Method: One hundred randomly selected TKA cases from 2011 were reviewed; thirteen exclusions did not fit the two groups (Local or Block). Sample characteristics and treatment outcomes were compared. Significant differences were determined by chi-squared and t-tests.

Results: Both groups had similar sample characteristics and no significant differences in pain measurements, frequency of dressing, venous morphine and range of motion of the operated knee at 6-week follow-up. Length of Stay ($t(85)=3.170$, $p=0.002$) was significantly longer in the Block ($M=4.65$, $SD=1.10$) than in the Local ($M=3.91$, $SD=1.06$) group. Oral Morphine use ($t(85)=2.744$, $p=0.007$) was significantly higher in the Block ($M=1.83$, $SD=1.57$) than in the Local ($M=0.98$, $SD=1.31$) group. Complication rates were similar for both groups.

Conclusions: Local group patients had significantly shorter hospital stays and used less morphine, with no increase in complications. LIA can be considered a safe approach and larger controlled randomised studies should be encouraged.

0448: PERIOPERATIVE STRATEGIES IN THE MANAGEMENT OF PATIENTS WITH PROXIMAL FEMUR FRACTURES IN 2011: A NATIONAL SURVEY OF ORTHOPAEDIC SPECIALIST TRAINEES

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Hip fractures are a frequent event, with a lack of evidence as to how these patients are globally treated peri-operatively and a need exists to identify current management patterns. A UK web-based survey investigated the rationale of fixation of AO 3.1.A.1 and AO 3.1.A.3 fractures, post-operative x-rays, venous, VTE prophylaxis and follow up.

249 trainees responded. 98% chose a sliding hip screw for the AO 3.1.A.1 fracture. For the AO 3.1.A.3 fracture 95% chose an intra-medullary device. 24% of respondents selected the option most representative of current NICE guidelines for VTE prophylaxis. 79% requested post-operative x-rays and 87% outpatient follow up.

Trainees show compliance with published evidence in terms of their choice of fixation of the AO 3.1.A.1 fracture pattern. Fixation of the AO 3.1.A.3 fracture with an intra-medullary device is clearly common place, but the evidence to support this is currently not conclusive. Routine post-operative x-rays are not supported by the evidence and are unnecessary in terms of cost and radiation exposure. Routine outpatient follow up is an increased burden on finite resources.

This work is evidence of contemporary hip fracture peri-operative care and has implications in light of the growing burden of these injuries.

0494: THROMBOEMBOLIC PROPHYLAXIS IN ACUTE ACHILLES TENDON RUPTURE

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Aim: Current evidence for routine thromboprophylaxis in acute Achilles tendon (TA) ruptures is controversial and lacking. Rate of a venous thromboembolic event (VTE) reportedly varies between 6.3%– 34%. No national guidelines have been set specifically for this purpose. The aim of this audit is to assess the rate of VTEs and review the need for routine thromboprophylaxis for VTE at our local Orthopaedics Department with suggestions of a protocol of management.

Method: Retrospective review of patient demographics, management of acute TA rupture, follow up and rate of VTEs using case notes and imaging services for patients with acute TA rupture during May 2009 to October 2011.

Results: The rate of VTE in our case series of 76 patients was 6.6% (5/76) during the 30 months study period. 3 patients had distal DVT and 2 patients had non-fatal pulmonary embolism all within 3 months of TA rupture diagnoses. All patients had additional associated risks for thromboembolic events.

Conclusions: In view of the evidence, low incidence of VTE does not support the use of routine chemoprophylaxis. However, anticoagulation should be considered for patients who have additional factors contributing to VTEs in the setting of acute TA ruptures.

0508: AUDIT OF HANDOVER PRACTICE IN ORTHOPAEDICS AND TRAUMA – CAN IMPROVEMENTS BE MADE?

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Aims: To assess the efficiency and safety of patient handover in a level 2 trauma centre with a catchment of 650,000 patients.

Method: A two week sample of handover sheets was compared to the national standards from the Royal College of Surgeons, England. These identify categories of handover information. Fifteen doctors (Foundation Year 1 to Core Surgical Trainee Year 2) collected whatever documentation for handover had been used. A template handover sheet was then created and our data presented at the multi-disciplinary departmental meeting. It was readily adopted as the working on-call list and three months later the audit cycle was completed.

Results: The initial audit revealed 54% of the minimum information was handed over. The re-audit showed this to be 90% and of all the points within the guideline, 66% were now being handed over – an increase of 36% and 27% respectively.

Conclusion: A clear need for improvement in handover practice has been fulfilled by the introduction of a simple, well designed template – demonstrating a safer and more complete handover practice. Shift patterns add to the challenge of handover and a system needs to be in place to accommodate this to optimise patient care.

0522: GENERAL PRACTITIONERS REQUESTS OF KNEE RADIOGRAPHS: WEIGHT BEARING VERSUS NON WEIGHT BEARING AP VIEWS

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Aim: To determine how many patients, with suspected osteoarthritis of the knee, were being referred to orthopaedic outpatient clinics from General Practitioner's with non-weight bearing AP knee radiographs, to determine the number of patients subsequently having repeat weight bearing AP knee radiographs and the financial cost.

Method: Prospectively over a two week period we reviewed the radiological investigations ordered prior to the consultation in orthopaedic outpatients.

Results: GP's referred 36 (87.8%) the remaining 5 (12.8%) were tertiary referrals. None of the GP referrals had weight bearing AP knee radiographs prior to the consultation. Half had non-weight bearing AP knee radiographs the remainder had no radiographs taken prior to referral. Weight bearing AP knee radiographs were ordered in clinic on 23 (63.9%) of the GP referred patients, of these 9 (25%) had previous non-weight bearing AP knee radiographs thus necessitating further radiation exposure and expense.

Conclusion: The additional cost for a single knee radiograph at our hospital is £30. If we extrapolate the 9 patients requiring repeat weight bearing AP knee radiographs in the study equates to £ 7,020 per annum. We suggest that all requests to the radiology department for knee radiographs from GP's are standardised to be weight-bearing AP.

0541: AN AUDIT OF THE IMPACT OF PSYCHIATRIC ILLNESS OR INTOXICATION ON ORTHOPAEDIC MORBIDITY & COST

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Aim: To assess the impact of psychiatric illness and/or intoxication on injury severity, duration and expense of hospital stay in orthopaedic patients.

Methods: Orthopaedic admissions, for July 2011, from the Emergency Department at St James's Hospital were reviewed. Patients were categorized into 4 groups. Group 1 (n=65). Control group - no psychiatric co-morbidities (and sober on admission). Group 2 (n=15). Patients with psychiatric co-morbidity. Group 3 (n=8). Patients in which their psychiatric co-morbidity directly caused injury. Group 4 (n=15). Patients in which intoxication (alcohol and/or drug) directly caused injury.

Results: In Comparison to Group 1: (per patient basis) Group 2: 3x longer average duration of hospital stay, Twice number of theatre procedures, Twice number of scans (XR, CT and MRI). Group 3: 6x higher average duration of stay, 3x number of theatre procedures, 3.5x number of scans, 2x number of Multi-Disciplinary team components.

Group 4: 3x longer average duration of stay, 1.25 number of scans, 1.5x number of MDT components. The average Injury Severity Score was highest in Group 3.

Conclusions: Psychiatric illness and substance abuse were associated with substantially greater orthopaedic morbidity, duration of stay and cost.

0612: AUDIT OF DABIGATRAN ETEXILATE FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM AFTER ELECTIVE HIP AND KNEE SURGERY

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Aim: This audit assessed compliance with Gateshead Hospital NHS Foundation Trust guidelines on dabigatran for the prevention of venous thromboembolism (VTE) after elective total hip and knee replacement surgery.

Method: The notes of 62 patients who underwent elective hip and knee replacement surgery in June 2010 were retrospectively reviewed for compliance with trust VTE guidelines. Following implementation of recommendations for staff training, re-audit was performed in June 2011.

Results: 74% and 33% of patients received dabigatran whilst inpatients in 2010 and 2011 retrospectively. Re-audit demonstrated an improvement from 85% to 100% for patients receiving the correct post-operative dose of dabigatran. In both audits, half of patients received dabigatran within the 1-4 hour time frame after surgery. The percentage of patients not receiving any VTE prophylaxis on the day of surgery fell from 13% in 2010 to 6.6% in 2011.